

## Material Safety Data Sheet

Issue date: June 18, 1996

**1.0 Preparation and company identity**

Identification of the preparation

**HP Laser Jet Cartridge C 3973A-For HP4-4M**

Company identification

**HEWLETT-PACKARD COMPANY**  
11311 Chinden Blvd.  
Boise, ID 83714

Telephone number

**Hewlett-Packard - Boise Site**  
**(208) 396-6000****Hewlett-Packard - General Information**  
**208 323-2551****2.0 Composition/information on ingredients**

**This product is a toner preparation that is used in a Hewlett-Packard 4, 4 Plus, 4M, 4M Plus, or 5 LaserJet printer.**

Ingredients

<u>Substance</u>	<u>CAS number</u>	<u>Percent (wt)</u>	<u>Symbol</u>	<u>R Phrase</u>
<b>Styrene Acrylate Copolymer</b>		<b>45 - 55</b>	-	-
<b>Iron Oxide</b>	<b>(1317-61-9)</b>	<b>45 - 55</b>	-	-

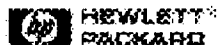
**3.0 Hazards identification**

Potential Health Effects

<b>Ingestion effects:</b>	<b>Ingestion is not applicable route of entry for intended use.</b>
<b>Inhalation effects:</b>	<b>Minimal respiratory tract irritation may occur with exposure to large amount of toner dust.</b>
<b>Eye Effects:</b>	<b>May cause eye irritation.</b>
<b>Skin effects:</b>	<b>Unlikely to cause skin irritation.</b>

Environmental hazards

**No particular hazards known.**



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#### 4.0 First-aid measures

##### After ingestion

**Rinse mouth with water. Drink one to two glasses of water. If symptoms occur, consult a physician.**

##### After inhalation

**Move person to fresh air immediately. If symptoms occur, consult a physician.**

##### After contact with eyes

**Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. If symptoms occur, consult a physician.**

##### After contact with skin

**Wash affected areas thoroughly with soap and water. If symptoms occur, consult a physician.**

#### 5.0 Fire-fighting measures

Flash Point (method used):

**No data available**

Ignition Temperature:

**No data available**

Flammability:

**Non-flammable solid (according to test methods of USA 16 CFR 1500.44 and 84/449/EEC (Annex V) A.10)**

Flammable Limits:

**No data available**

Extinguishing Media:

**CO<sub>2</sub>, water, dry chemical**

Special Fire Fighting Procedures:

**None**

Unusual Fire & Explosion Hazards:

**Toner material, like most organic material in powder form, is capable of creating a dust explosion.**

#### 6.0 Accidental release measures

##### Spill and Leakage Procedures

**Wear personal protective equipment as described in Section 8. Minimize the release of particulates. Vacuum or sweep the material into a bag or other sealed container and dispose in accordance with local requirements.**

##### Environmental precautions

**Do not discharge into drains (See also section 13 Disposal Considerations).**

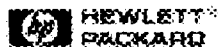
#### 7.0 Handling and storage

##### Advise on safe handling and protection against fire

**Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.**

##### Requirements for storage rooms and advice on storage compatibility

**Keep container closed and store at room temperature. Keep away from strong oxidizers.**



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## 8.0 Exposure controls / personal protection

### Exposure Limits For Toner:

USA OSHA (TWA <sup>5</sup> )/PEL:	15 mg/m <sup>3</sup> (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)
ACGIH (TWA/TLV):	10 mg/m <sup>3</sup> (Inhalable Particulate) 3 mg/m <sup>3</sup> (Respirable Particulate)
DFG (MAK): (Also refer to Section 2.)	6 mg/m <sup>3</sup> (Feinstaubkonzentration)
Respiratory Protection:	Not required under intended use.
Ventilation:	Good general ventilation should be sufficient under intended use.
Protective Gloves:	Not required under intended use.
Eye Protection:	Not required under intended use.
Other Protective Equipment:	Not required under intended use.

## 9.0 Physical and chemical properties

Boiling Point:	Not applicable
Melting Point:	100 - 150°C (Softening Point)
Vapor Pressure (mmHg.):	Not applicable
Vapor Density (Air=1):	Not applicable
Solubility in Water:	Negligible
Solubility in Organic Solvents:	Partially soluble in toluene and xylene.
Specific Gravity (H <sub>2</sub> O=1):	1.4- 1.6
Percent Volatile by Volume:	Not applicable
Evaporation Rate (Butyl Acetate=1):	Not applicable
pH:	Not applicable
Appearance and Odor:	Fine black powder, slight plastic odor.

## 10.0 Stability and reactivity

Stability:	Stable
Incompatibility:	Strong oxidizers
Hazardous Decomposition Products:	Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
Hazardous Polymerization:	Will not occur.



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11.0 Toxicological information
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Acute Toxicity:

Skin Contact:

**Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC based on test data of rabbits.**

Chronic Toxicity:

**No data available.**

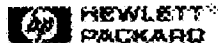
Other Toxicity Data:

Mutagenicity:

**Negative (Ames Test: Salmonella typhimurium)**

Carcinogenicity:

**Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or**



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Other Toxicity Data:

Mutagenicity:

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**Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California).**

#### 12.0 Ecological information

**No data available for ecological and wastewater treatment (sewage) systems.**

#### 13.0 Disposal considerations

Product / unused product / contaminated packaging (for Germany only)

**Recommendation: consultation with the disposal agency and the relevant authorities; cleansing agent is water.**

#### 14.0 Transportation information

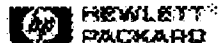
International Transport Information:

UN No.: **None**

Hazards Class: **None**

Packing Group: **None**

Special Precautions: **None**



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15.0 Regulatory information
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Chemicals Required to Report Under Sara Title III Section 313 (USA):

**None**

Label Information According to the Directives 88/379/EEC and 67/548/EEC (EU):

Symbol and Indications:

**Not required.**

R Phrases:

**Not required.**

S Phrases:

**Not required.**

Dangerous Components (CAS No.) wt%:

**None**

Other:

**None**

Specific provisions in relation to protection of man or the environment (EU):

Regulation (EEC) 2455/92:

**Not regulated.**

Directive 76/769/EEC:

**Not regulated.**

Other:

**None**

16.0 Other information
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**This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products as described or their suitability for a particular application.**

**For general information, contact Hewlett-Packard at 208 323-2551.**